

Listing of Claims:

1-38. (canceled).

39. (New) A communication system of a construction machine for communicating between said construction machine and a terminal device, which comprises:

said construction machine including a communication device with means for enabling communications with said terminal device when an electrical connection between said communication device and a power source is ON, and location detecting means for detecting a location of said construction machine; and

said construction machine including means for periodically turning ON and OFF said electrical connection between said power source and said communication device when an engine of said construction machine is stopped; and

said communication device performing said communications when said electrical connection is turned ON.

40. (New) A communication system of a construction machine for communicating between said construction machine and a terminal device, which comprises:

a communication device with means for enabling communications with said terminal device when an electrical connection between said communication device and a power source is ON, and said construction machine including travel speed computing means for computing a travel speed of said construction machine;

said construction machine including means for periodically turning ON and OFF said electrical connection between said power source and said communication device when an engine of said construction machine is stopped; and

said communication device performing said communications when said electrical connection is turned ON.

41. (New) A communication system of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including detecting means for detecting a fact that an engine of said construction machine has been started; and when said detecting means detects that said engine is started within a predetermined time zone, information about the starting of said construction machine is sent to said terminal device from said construction machine.

42. (New) A communication system of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual

transmission and reception, and in accordance with an input operation performed at said terminal device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including totaling means for totaling engine operating hours of said construction machine; and when a cumulative value of said engine operating hours totaled by said totaling means for said construction machine either reaches a specified value, or increases by a specified quantity, the construction machine information of said construction machine is sent to said terminal device from said construction machine.

43. (New) A communication system of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including detecting means for detecting a location of said construction machine; and when the location of said construction machine detected by said detecting means moves outside a predetermined area or inside of a predetermined area, the construction machine information is sent to said terminal device from said construction machine.

44. (New) A communication system of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including detecting means for detecting a relative location of said construction machine in relation to a set range; and when the relative location of said construction machine in relation to the set range constitutes a specified relative location, the construction machine information is sent to said terminal device from said construction machine.

45. (New) A communication device of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal

device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including detecting means for detecting a drop in voltage of a power source mounted to said construction machine; and when the voltage of said power source detected by said detecting means drops below a specified value, the construction machine information is sent to said terminal device from said construction machine.

46. (New) A communication system of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal device of requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and the construction machine, which receives the request content, acquires, via said construction machine, the construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, which comprises:

said construction machine including detecting means for detecting a location of said construction machine, and

the construction machine information of said construction machine being sent to said terminal device from said construction machine when a content of construction machine-related data to be sent this time differs from a content of construction machine-related data sent at a previous time.

47. (New) A communication device of a construction machine for communicating between a plurality of construction machines and a terminal device, which comprises:

one or more business offices at/from which said plurality of construction machines are stored/dispatched;

one or more work sites at which said plurality of construction machines are operated;

said plurality of construction machines respectively including location detecting means for detecting locations of said plurality of construction machines;

based on detection results of said location detecting means and location data for said one or more business offices and said the one or more work sites, when one construction machine of said plurality of construction machines enters one business office of said one or more business offices or one work site of said one or more work sites, data stating that said one construction machine has entered said one business office or said one work site is sent to said terminal device from said one construction machine; and when said one construction machine exits from said one business office or said one work site, data stating that said one construction machine has exited said one business office or said one work site is sent to said terminal device from said one construction machine; and

based on the sent data, data on the entry/exit of said plurality of construction machines to/from said one business office or said one work site is managed by said terminal device.

48. (New) The communication device of a construction machine according to claim 47, wherein when said one construction machine exits from said one business office or said one work site, location data is sent to said terminal device from said one construction machine each time said one construction machine moves a predetermined distance, and based on the sent location data, data on a movement history of said one construction machine is managed by said terminal device.

49. (New) A communication device of a mobile unit for communicating between a terminal device and a plurality of operational mobile units, which comprises:

a transportation mobile unit for transporting said plurality of operational mobile units;  
one or more storage and dispatch areas at/from which said plurality of operational mobile units are stored/dispatched;

one or more operating areas where said plurality of operational mobile units are operated;

said plurality of operational mobile units respectively including location detecting means for detecting locations of said plurality of operational mobile units;

based on detection results of said location detecting means and location data of said one or more operating areas, data as to whether or not one operational mobile unit of said plurality of

operation mobile units is at one operating area of said one or more operating areas is sent to said terminal device from said one operational mobile unit;

based on detection results of said location detecting means and location data of said one or more storage and dispatch areas; when said one operational mobile unit enters one storage and dispatch area of said one or more storage and dispatch areas, data that said one operational mobile unit has entered said one storage and dispatch area is sent to said terminal device from said one operational mobile unit;

when said operational mobile unit exits from said one storage and dispatch area, data that said one operational mobile unit exited from said one storage and dispatch area is sent to said terminal device from said one operational mobile unit;

based on the sent data, data as to whether said plurality of operational mobile units are either being stored at or have been dispatched from said one or more storage and dispatch areas, and data as to whether or not said plurality of operational mobile units are at said one or more operating areas are managed by said terminal device; and

based on the managed data, said terminal device issues instructions to said transportation mobile unit to transport said one operational mobile unit from said one operating area to said one storage and dispatch area, or to transport said one operational mobile unit from said one storage and dispatch area to said one operating area.



50. (New) A communication device of a mobile unit for communicating between a terminal device and a plurality of operational mobile units for operating within one or more operating areas, which comprises:

a transportation mobile unit for transporting said plurality of operational mobile units is provided;

one or more storage and dispatch areas at/from which said plurality of operational mobile units are stored/dispatched;

one or more operating areas where said plurality of operational mobile units are operated;

said plurality of operational mobile units respectively including location detecting means for detecting locations of said plurality of operational mobile units;

based on detection results of said location detecting means, location data of said one or more storage and dispatch areas, and location data of said one or more operating areas; when one operational mobile unit of said plurality of operational mobile enters either one storage and dispatch area of one or more storage and dispatch areas, or one operating area of said one or more operating areas, data that the one operational mobile unit entered said one storage and dispatch or said one operating area is sent to said terminal device from said one operational mobile unit, and when said operational mobile unit exits from either said one storage and dispatch area, or said one operating area, data that this one operational mobile unit exited from said one storage and dispatch area or said one operating area is sent to said terminal device from said one operational mobile unit;

based on the sent data, data as to whether said plurality of operational mobile units are either being stored at or have been dispatched from said one or more storage and dispatch areas, and data as to whether or not said plurality of operational mobile units are at said one or more operating areas are managed by said terminal device; and

based on the managed data, said terminal device issues instructions to said transportation mobile unit to either transport said one operational mobile unit from said one operating area to said one storage and dispatch area, or to transport said one operational mobile unit from said one storage and dispatch area to said one operating area.

51. (New) A communication system of a construction machine for communicating between a plurality of construction machines and a terminal device, which comprises:

said plurality of construction machines including a communication device enabling communications with said terminal device when an electrical connection between said communication device and a power source is turned ON;

said plurality of construction machines respectively including means for periodically turning ON and OFF at a predetermined period said electrical connection between said power source and said communication device when an engine of one construction machine of said plurality of construction machines is stopped; and

said one construction machines changing said predetermined period in accordance with change data sent to said one construction machine from said terminal device.

52. (new) The communication system of a construction machine according to claim 39, wherein a period of time during which said means for periodically turning ON and OFF is turned ON is a minimum time necessary for performing a communication processing.

53. (New) The communication system of a construction machine according to claim 39, wherein a time in which said means for periodically turning ON and OFF is turned OFF becomes shorter as the location of said one construction machine detected by said location means strays from a specific area or approaches a specific area.

54. (New) The communication system of a construction machine according to claim 39, wherein a period for said turning ON and OFF is set arbitrarily.

55. (New) The communication system of a construction machine according to claim 40, wherein a period of time during which said means for periodically turning ON and OFF is turned ON is a minimum time necessary for performing a communication processing.

56. (New) The communication system of a construction machine according to claim 40, further comprising location detecting means, wherein a time in which said means for periodically turning ON and OFF is turned OFF becomes shorter as a travel speed detected by the location detecting means becomes faster.

57. (New) The communication system of a construction machine according to claim 40, wherein a period for said turning ON and OFF is set arbitrarily.

58. (New) A communication system of a construction machine for communicating between said construction machine and a terminal device, comprising:

said construction machine having a communication device with means for communicating with said terminal device when an electrical connection between said communication device and a power source is ON, location detecting means for detecting a location of said construction machine, and state detecting means for detecting a state of said construction machine; and

said construction machine further including means for periodically turning ON and OFF said electrical connection between said power source and said communication device when an engine of said construction machine is stopped; and

when the electrical connection is turned ON, said communication device performing said communications processing or said state detecting means detecting the state of the construction machine.

59. (New) A communication device of a construction machine where said construction machine and a terminal device are connected by communication means enabling mutual transmission and reception, and in accordance with an input operation performed at said terminal device requesting construction machine information related to said construction machine, a content of a request is sent to said construction machine, and said construction machine, which receives the request content, acquires, via said construction machine, construction machine information corresponding to the request content and sends the acquired construction machine information to said terminal device, comprising:

said construction machine including detecting means for detecting a drop in voltage of a power source mounted to said construction machine; and means for periodically turning ON and OFF an electrical connection between said power source and said communication device when the engine of said construction machine is stopped; and when the voltage of said power source detected by said detecting means drops below a specified value, a time in which said means for periodically turning ON and OFF is turned OFF becomes longer.